

# **The Invisible Tools of a Timber Framer**

## A survey of principles, situations and procedures for marking

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# Abstract

My thesis focuses on the marking procedures when building timber frames, from the idea of a construction to the cutting of the timbers. The marking procedures are essential parts of the building process, and without markings you don't know where to cut. Markings can be very different from one region to the other, from one carpenter to another and dependent on the material and the purpose of the construction. It is a highly skilled process demanding a three-dimensional capacity of the carpenter and involving a general craft knowledge in every decision process. Knowledge of how to handle irregular materials, how to transfer a shape from one place to another, how to establish and work with reference planes, reference lines and reference points and how to use practical geometry and developed drawing in the layout.

The thesis is a survey of the marking procedures from the timber framing traditions in northwestern Europe and Scandinavia, and the aim is to provide a greater understanding of the basic principles and applications of the marking procedures. I have taken a practice-led approach undertaking the dual role of being both practitioner and researcher, and this has been a way to enter the executional level of the craft. Procedural descriptions have been used as a method to verbalize the actions involved in the marking procedures, and they have been useful in studies of written sources and literature. They have been applied when recording my own experiences from working seminars and experiments and in the dialogues with carpenters as a basis for the mutual understanding of the situations.

In the survey the general principles are outlined, the possible situations are defined and a number of procedures are analysed and explained. The extent of the survey is embodied in a 'map' which demonstrates the complexity of marking situations and procedures and how they are interconnected. The thesis provides a platform for understanding the application of the skilled but often not verbalized knowledge which is internalized in the craftsmen and only brought forward in the execution of their work.

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